Epitomes

Important Advances in Clinical Medicine

Dermatology

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The Council on Scientific Affairs of the California Medical Association presents the following epitomes of progress in dermatology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and clinical importance. The items are presented in simple epitome, and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist busy practitioners, students, researchers, and scholars to stay abreast of progress in medicine, whether in their own field of special interest or another.

The epitomes included here were selected by the Advisory Panel to the Section on Dermatology of the California Medical Association, and the summaries were prepared under the direction of Seth L. Matarasso, MD, and the panel.

Cutaneous Manifestations in Patients Infected With the Human Immunodeficiency Virus

THE SKIN IS an important end organ for diseases associated with the human immunodeficiency virus (HIV). It may be involved in important opportunistic infections. In patients with the acquired immunodeficiency syndrome (AIDS), inflammatory skin diseases such as psoriasis, eczemas, drug reactions, and pruritic folliculitis also commonly develop. These reactions are characteristic of HIV-associated skin disease and may be associated with a certain stage of the disease. Furthermore, the occurrence of skin disorders in HIV-infected patients is an important clue to the pathogenesis of common skin diseases in persons with normal immunity.

Now that most of the inflammatory skin disorders affecting HIV-infected persons have been carefully described, data have become available about their prevalence. More important, however, the skin can be used as a marker for staging HIV disease in some patients, a finding that may be useful in areas where routine helper T-cell counts are not available. Skin diseases that may occur before the development of other HIV symptoms (CD4 count $> 200 \times 10^6$ per liter) include seborrheic dermatitis, psoriasis, pruritus ani, herpes zoster, common or genital warts, oral hairy leukoplakia, oral candidiasis, and Kaposi's sarcoma. These disorders may persist throughout the course of a patient's HIV disease. Disorders seen almost exclusively once a patient has AIDS include eosinophilic folliculitis, chronic photodermatitis, persistent eczema, chronic herpes simplex, and molluscum contagiosum.

Certain skin diseases that have been presumed to have an immunologic basis occur with increased frequency in HIV-infected persons. These include seborrheic dermatitis, cutaneous drug reactions (including erythema multiforme major), psoriasis, photodermatitis, and various eczemas. Because these disorders do not occur with increased frequency in other immune-suppressed hosts, HIV somehow specifically allows their expression. This is an important clue to the pathogenesis of these skin diseases. For many years, researchers had thought that "helper" T cells were critical in the development of psoriasis. This was inconsistent with the frequent occurrence of psoriasis in patients with low helper T-cell counts. Recent studies in normal hosts with psoriasis have shown that suppressor T cells may be critical in the development of psoriatic lesions. This is more consistent with observations in HIV-infected patients. This virus, therefore, may provide an opportunity for an increased understanding of the pathogenesis of some common skin disorders.

Cryptococcosis occurs in about 6% of patients with AIDS, usually as meningitis. The prevalence of skin lesions in these patients is also 6%. Less than half of the patients with cutaneous cryptococcosis have symptoms or signs of central nervous system disease, yet all patients are positive for the serum cryptococcal antigen, and in most the cerebrospinal fluid is also positive for the cryptococcal antigen. Cutaneous cryptococcosis must be assumed to be systemic cryptococcosis, and a systemic evaluation, including lumbar puncture, is required, independent of the findings of a history and physical examination.

In patients with advanced AIDS (CD4 count $< 50 \times 10^6$ per liter), *Acanthamoeba* species may cause disease. In healthy persons and other immunocompromised hosts, these protozoa normally cause disease of the central nervous system, often encephalitis. In patients with AIDS, however, skin lesions are often the primary manifestation, and central nervous system disease occurs in only half of patients. Skin lesions are typically subcutaneous nodules that break down, forming nonhealing ulcerations covered with a serosanguinous crust. This infection is identified by skin biopsy. The organisms are abundant in tissue but difficult to identify with routine stains. Trichrome or periodic acid–Schiff stains may help. The clues to the diagnosis are skin ulcerations, chronic sinusitis (sometimes with nasal septum or hard palate perforation), and a skin